Procurement Language Residential Indoor and Outdoor Light Fixtures

The Vendor Must:

Assure that all fixtures meet the following ENERGY STAR guidelines for the appropriate category:

- Indoor fixtures must meet the guidelines in Table 1 below.
- Outdoor fixtures with light source efficiency as a key factor shall meet the guidelines in Table 2A below (light source efficiency) OR Table 2B below (operating time). Vendor will specify under which Table the fixtures comply.
- Outdoor fixtures with operating time as a key factor (such as for use with a motion detector) shall meet the guidelines in Table 2B below.

Ship all products with the appropriate lamp included. Lamp should be of correct diameter, length, wattage, color rendering index (CRI) and base type for fixture provided.

Note: Manufacturer is not required to package fixtures with lamps. If you wish to specify the fixture without the lamp, you should require that the vendor shall note the appropriate lamp descriptor, including lamp diameter, length, wattage, color rendering index (CRI) and base type. For best color, lamp shall have a CRI of 70 or greater. Color temperature should be less than 30 for a warmer light, or greater than 30 for a cooler light.

For outdoor fixtures, include installation instructions or application information for:

- the specific recommended locations,
- appropriate use for the product,
- cold weather cautions shown graphically, and
- cautions for lamps with warm-up or restart time of more than 3 seconds.

For outdoor fixtures with motion sensors, the vendor shall include instructions on adjustment, coverage, types of motion detected, and how to avoid extraneous signals.

Table 1 - Criteria for ENERGY STAR-Compliant Indoor Light Fixtures

Energy-Efficiency Characteristics (including ballast)	Performance Specifications
All Lamp Types¹ - below 20 Watts input power (all lamp	\$ 50 lumens per Watt (lpW)
types) - 20 to 29 Watts input power (all lamp types)	\$ 55 lpW
- \$ 30 Watts input power (including the following lamp types: circular, pin-based CFLs, other non linear lamps and linear lamps \$ 24 inches)	\$ 60 lpW
Linear Lamps - \$ 30 Watts input power \$ 24 inches	\$ 70 lpW
Power Characteristics	
Power factor Current crest factor	\$ 0.5 # 1.7 (For fixtures shipped without lamps)
Electromagnetic and Radio Frequency Interference	Comply with FCC 47 CFR Part 18.305 and 18.307
Operating Characteristics	
Lamp Start	Lamp must continuously illuminate within one second of being switched on. For manufacturers using magnetic ballasts and quick start lamps, lamps must be included with fixtures when shipped from factory.
Light Quality	Color Rendering Index (CRI) of at least 80 for compact fluorescent lamps (lamp diameter smaller than 3/4 inch), and a CRI of at least 70 for all other lamps. ²
Dimming	Free standing "torchiere style" portable light fixtures with input power of 22 Watts or more shall be dimmable from 100% to 30% or less of maximum output, or be switchable to three levels of brightness with included switch. This requirement does not apply to lamps intended for bedsides, tabletops, or plug in fixtures that are then mounted with screws or otherwise permanently affixed to one location.

Noise	Ballasts if included must have sound rating of Class A or quieter.
Reliability/Durability	
Warranty for defects in materials and manufacturing	Repair or replacement of defective parts of the fixture housing or electronics (except lamp) for 2 years from the date of purchase. Written warranty must be included with fixture when purchased.
Longevity	Lenses or diffusers shall be constructed of glass or UV-stable optical grade plastics and be heat stable. Reflectors, if included, shall be UV resistant and heat stable. Must comply with ANSI/IEEE C62.41 specifications for withstanding electrical transients.
Safety	
	Fixtures must be tested and listed by UL, ETL, CSA or other independent agency acceptable for compliance with NFPA 70, National Electric Code.
	Ballasts shall be Class P thermally protected.

¹Initial lamp lumens from manufacturer's literature, derated by the ballast factor for the ballast used in the light fixture, yielding lamp/ballast system efficacy.

²If the lamp is not included in the fixture package, then the manufacturer shall note the appropriate generic lamp descriptors on the exterior packaging and in either included installation instructions or application information sent to specifiers.

Fixtures intended for outdoor use may meet ENERGY STAR specifications under either Table 2A: Light Source or Table 2B: Operating Time.

Table 2A - Criteria for ENERGY STAR-Compliant
Outdoor Light Fixtures: Light Source

Energy-Efficiency Characteristics	Performance Specifications
Maximum input power	150 Watts
System Efficacy (lumens per Watt) up to 70 Watts 71 to 150 Watts	\$ 40 lpW \$ 50 lpW
Mechanical	Lamp holder will operate only lamps that perform to the input power range of the fixture.
Operating Characteristics	
Re-set	Resets automatically to automatic mode within 24 hours of a manual override or testing operation.
Shut-off	Automatic shut-off during daylight hours.
Reliability	
Warranty for defects in materials and manufacturing	Repair or replacement of defective parts of the fixture housing or electronics (except lamp) for 2 years from the date of purchase. Written warranty must be included with fixture when purchased.
Safety	
	Fixtures must be tested and listed by UL, ETL, CSA or other independent agency acceptable for compliance with NFPA 70, National Electric Code including listing for damp or wet locations (Articles 410-4a and Article 100).

Table 2B - Criteria for ENERGY STAR-Compliant Outdoor Light Fixtures: Operating Time

Outdoor Light Fixtur	
Energy-Efficiency Characteristics	Performance Specifications
Maximum input power	250 Watts
Shut-off	Automatic shut-off during daylight hours and automatic shut-off within a maximum of 15 minutes of either a manual on signal, or no motion in the fixture's field of view.
Operating Characteristics	
Re-set	Resets automatically to automatic mode within 24 hours of a manual override or testing operation.
Lamp start	Lamp must continuously illuminate within 1 second of being switched on. For manufacturers using magnetic ballasts and quick start lamps, lamps must be included with fixtures when shipped from factory.
Reliability	
Warranty for defects in materials and manufacturing	Repair or replacement of defective parts of the fixture housing or electronics (except lamp) for 2 years from the date of purchase. Written warranty must be included with fixture when purchased.
Safety	
	Fixtures must be tested and listed by UL, ETL, CSA, or other independent agency acceptable for compliance with NFPA 70, National Electric Code including listing for damp or wet locations (Articles 410-4a and Article 100).